AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 4, with the following amended paragraph:

This application is related to co-pending and commonly assigned U.S. Patent Application to Yang et al., which was filed on November 5, 2003, contemporaneously with this application and entitled "SYSTEM AND METHOD FOR DETERMINING S-PARAMETERS USING A MATCHED LOAD," Serial No. 10/701,864, Attorney Docket No. 200314668-1, the disclosure of which is incorporated herein by reference.

Please replace the paragraph beginning on page 6, line 10, with the following amended paragraph:

Eq. 10 further can be rewritten to express a reflection coefficient (Γ_{2short}), which represents a ratio of transmission to ~~reflecttion~~reflection for the shorted condition of the output port P2. Γ_{2short} can be expressed as follows:

Please replace the Abstract with the following amended Abstract:

A system for determining S-parameters of a network includes an S-parameter calculator that computes the S-parameters of the network based on waveform parameters determined through single port measurements at each of plural ports of the network. A method for determining S-parameters of a network includes determining waveform parameters based on single port measurements performed at plural ports of the network, and determining S-parameters of the network based on the waveform parameters.